04-	17	-0
U	, ,	- 1

icle the envelope

PTO/SB/05 (11-00) or use through 10/31/2002. OMB 0651-0032

Please type a plus sign (+) inside this

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

UTILITY PATENT APPLICATION **TRANSMITTAL**

1242/26/2 Attorney Docket No. First Inventor David B. Mount See 1 in Addendum

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Express Mail Label No. EK580268211US

	ATION ELEMENTS cerning utility patent application conte		DRESS	TO: Box	stant Comi Patent Ap hington, D	
1. X Fee Transmittal I (Submit an original and a Applicant claims See 37 CFR 1.27 3. X Specification (preferred arrangement - Descriptive title - Cross Reference - Statement Rege - Reference to so or a computer - Background of - Brief Summary	Form (e.g., PTO/SB/17) In duplicate for fee processing) Is mall entity status. If Total Pages If a set forth below) If e of the invention If the invention ce to Related Applications It is a set of the invention contained a set of t	7. [8. N (a.	Comput lucleotide and if applicable, is Specification i. X Staten	om or CD-R in ter Program (d/or Amino Ad all necessary uter Readable n Sequence I CD-ROM or paper ments verifyin	duplicate, Appendix) cid Sequer) e Form (C Listing on: r CD-R (2)	, large table or) nce Submission :RF)
- Detailed Description - Claim(s) - Abstract of the Disclosure 4. X Drawing(s) (35 U.S.C. 113) [Total Sheets 42] 9. X Assignment Papers (cover sheet & document(s)) 10. 37 CFR 3.73(b) Statement (when there is an assignee) Power of Attorney 11. English Translation Document (if applicable) 12. Information Disclosure Copies of ID.					Power of Attorney	
5. Oath or Declaration [Total Pages 3] a. X Unexecuted Statement (IDS)/PTO-1449 Citations b. Copy from a prior application (37 CFR 1.63 (d)) (for continuation/divisional with Box 18 completed) i. DELETION OF INVENTOR(S) 12. Statement (IDS)/PTO-1449 Citations Preliminary Amendment Return Receipt Postcard (MPEP 503) (Should be specifically itemized) 14. X Certified Copy of Priority Document(s)					Citations PEP 503) ed)	
Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b). Request and Certification under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent Check for \$1.740.00						
18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76: Continuation Divisional Continuation-in-part (CIP) Frior application information: Examiner Group Art Unit: For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.						
	19. CORRESPO					
X Customer Number or Bar Code Label (Install Customer Number of B						
Name	25297	7				
	PATENT TRADEMARK	COPPICE	*			
Address		,				
City		State			Zip Co	ode
Country		Telephone			Fax	
Name (Print/Type)	Arles A. Taylor, Jr.		gistration No	o. (Attorney	/Agent) 3	39,395
Signature	ales a. Taylo,	} ·				April 16, 2001

the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231.







PTO/SB/17 (11-00)

Approved for use through 10/31/2002. OMB 0651-0032 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995. no persons are required to respond to a collection of information unless it displays a valid OMB control number.

FEE TRANSMITTAL for FY 2001

Patent fees are subject to annual revision.

TOTAL AMOUNT OF PAYMEN	TOTAL	AMOUNT	OF P	AYMEN	Т
------------------------	--------------	--------	------	-------	---

(\$) <u>1740.00</u>

Complete if Known			
Application Number			
Filing Date			
First Named Inventor	David B. Mount		
Examiner Name			
Group Art Unit			
Attorney Docket No.	1242/26/2	_	

METHOD OF PAYMENT	FEE CALCULATION (continued)	
1. The Commissioner is hereby authorized to charge	3. ADDITIONAL FEES	
indicated fees and credit any overpayments to: Deposit	Large Small	
Account Number	Entity Entity Fee Fee Fee Fee Fee Description	Fac Bald
Deposit	Code (\$) Code (\$) Fee Description	Fee Paid
Account Name	105 130 205 65 Surcharge - late filing fee or oath	
Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17	127 50 227 25 Surcharge - late provisional filing fee or cover sheet	
Applicant claims small entity status.	139 130 139 130 Non-English specification	
See 37 CFR 1.27 2. X Payment Enclosed:	147 2,520 147 2,520 For filing a request for ex parte reexamination	
2. X Payment Enclosed: X Check Credit card Order Other	112 920* 112 920* Requesting publication of SIR prior to Examiner action	
FEE CALCULATION	113 1,840* 113 1,840* Requesting publication of SIR after Examiner action	
1. BASIC FILING FEE	115 110 215 55 Extension for reply within first month	
Large Entity Small Entity	116 390 216 195 Extension for reply within second month	
Fee Fee Fee Fee Description Code (\$) Code (\$) Fee Paid	117 890 217 445 Extension for reply within third month	
101 710 201 355 Utility filing fee 355	118 1,390 218 695 Extension for reply within fourth month	
106 320 206 160 Design filing fee	128 1,890 228 945 Extension for reply within fifth month	
107 490 207 245 Plant filing fee	119 310 219 155 Notice of Appeal	
108 710 208 355 Reissue filing fee	120 310 220 155 Filing a brief in support of an appeal	
114 150 214 75 Provisional filing fee	121 270 221 135 Request for oral hearing	
CUPTOTAL (4) (C) 055 00	138 1,510 138 1,510 Petition to institute a public use proceeding	
SUBTOTAL (1) (\$) 355.00	140 110 240 55 Petition to revive - unavoidable	
2. EXTRA CLAIM FEES Fee from	141 1,240 241 620 Petition to revive - unintentional	
Extra Claims below Fee Paid	142 1,240 242 620 Utility issue fee (or reissue)	
Total Claims 110 -20 = 90 x 9 = 810	143 440 243 220 Design issue fee	
Claims	144 600 244 300 Plant issue fee	 !
Multiple Dependent 135 = 135	122 130 122 130 Petitions to the Commissioner	
Lana Fallina and a	123 50 123 50 Processing fee under 37 CFR 1.17(q)	
Large Entity Small Entity Fee Fee Fee Fee Description	126 180 126 180 Submission of Information Disclosure Stmt	
Code (\$) Code (\$) 103 18 203 9 Claims in excess of 20	581 40 581 40 Recording each patent assignment per property (times number of properties)	
102 80 202 40 Independent claims in excess of 3	146 710 246 355 Filing a submission after final rejection	
104 270 204 135 Multiple dependent claim, if not paid	(37 ČFR § 1.129(a))	
109 80 209 40 ** Reissue independent claims over original patent	149 710 249 355 For each additional invention to be examined (37 CFR § 1.129(b))	
110 18 210 9 ** Reissue claims in excess of 20	179 710 279 355 Request for Continued Examination (RCE)	
and over original patent	169 900 169 900 Request for expedited examination of a design application	
SUBTOTAL (2) (\$) 1385.00	Other fee (specify)	,
**or number previously paid, if greater; For Reissues, see above	*Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$)	JU

SUBMITTED BY				Complete (if applicable)		
Name (Print/Type)	Arles A. Taylor, Jr.	Registration No. (Attorney/Agent)	39,395	Telephone	(919)493-8000	
Signature	Me a Toph of			Date	april 16,2001	

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

Addendum

1. PURIFIED AND ISOLATED POTASSIUM-CHLORIDE COTRANSPORTER NUCLEIC ACIDS AND POLYPEPTIDES AND THERAPEUTIC AND SCREENING METHODS USING SAME





JENKINS & WILSON, P.A.

PATENT ATTORNEYS
SUITE 1400 UNIVERSITY TOWER
3100 TOWER BOULEVARD
DURHAM, NORTH CAROLINA 27707

TELEPHONE (919) 493-8000 FACSIMILE (919) 419-0383

WEBSITE JENKINSANDWILSON.COM RALEIGH OFFICE

NCSU CENTENNIAL CAMPUS
VENTURE II SUITE 400
1920 MAIN CAMPUS DRIVE
RALEIGH, NORTH CAROLINA 27606

TELEPHONE (919) 424-3710 FACSIMILE (919) 424-3711

April 16, 2001

April N. Williams

Commissioner for Patents
BOX PATENT APPLICATION

Washington, D.C. 20231

Re: U.S. Patent Application for PURIFIED AND ISOLATED POTASSIUM-

CHLORIDE COTRANSPORTER NUCLEIC ACIDS AND POLYPEPTIDES AND THERAPEUTIC AND SCREENING

"Express Mail" mailing number.: __EK580268211US

Patent and Trademarks, Washington, D.C.

METHODS USING SAME Our File No. 1242/26/2

Sir:

RICHARD E. JENKINS

JEFFREY L. WILSON ARLES A. TAYLOR, JR.

JENNIFER L. SKORD

DAVID P. GLOEKLER

GREGORY A. HUNT

JOHN A. LAMERDIN, PhD. (PATENT AGENT)

JULIE A. BROADUS, PhD. (PATENT AGENT)

DAVID P. STITZEL (PATENT AGENT)

E. ERIC MILLS, P.E. (PATENT AGENT)

Please find enclosed the following:

- A U.S. patent application for PURIFIED AND ISOLATED POTASSIUM-CHLORIDE COTRANSPORTER NUCLEIC ACIDS AND POLYPEPTIDES AND THERAPEUTIC AND SCREENING METHODS USING SAME (162 pages);
- 2. Forty-two (42) sheets of drawings;
- 3. Unexecuted Declaration (3 pages);
- 4. Copy of previously recorded executed Assignment (3 pages);
- 5. Utility Patent Application Transmittal Form (Form PTO/SB/05, 2 pages);
- 6. Fee Transmittal Form (Form PTO/SB/17) in duplicate;
- Copy of previously filed Recordation Form Cover Sheet (Form PTO-1595, 1 page);



Commissioner for Patents April 16, 2001 Page 2

- 8. Copy of Notice of Recordation of Assignment Document indicating reel/frame information;
- 9. Sequence Listing in Computer Readable Form (the undersigned hereby verifies the identity of the computer readable form of the Sequence Listing and the Sequence Listing as presented on the enclosed compact discs);
- 10. Sequence Listing on compact disc (in duplicate);
- 11. Transmittal Letter for Compact Discs (CDs) Bearing Sequence Listing Copy 1);
- 12. Transmittal Letter for Compact Discs (CDs) Bearing Sequence Listing Copy 2);
- 13. A check in the amount of \$1740.00 to cover the application filing fee;
- 14. A return-receipt postcard to be returned to our offices with the U.S. Patent and Trademark Office date stamp thereon; and
- 15. A Certificate of Express Mail No.: EK580268211US.

Please contact our offices if there are any questions.

Although a check is being submitted, the Commissioner is hereby authorized to charge any deficiency or credit any overpayment associated with the filing of this correspondence to Deposit Account Number <u>50-0426</u>.

Respectfully submitted,

JENKINS & WILSON, P.A.

Arles A. Taylor, Jr.

Registration No. 39,395

AAT/aim

Enclosures



BEARING SEQUENCE LISTING - COPY 1

Title of Invention:

PURIFIED AND ISOLATED POTASSIUM-

CHLORIDE COTRANSPORTER NUCLEIC

ACIDS AND POLYPEPTIDES AND

THERAPEUTIC AND SCREENING METHODS

USING SAME

Applicants:

David B. Mount, Eric Delpire, Gererdo Gamba,

Alfred L. George, Jr.

Attorney Docket No.:

1242/26/2

Customer No.:

25297

Filing Date:

April 16, 2001

<u>Description of Compact Discs Bearing Sequence Listing:</u>

The Sequence Listing associated with the disclosure of the abovenoted application has been submitted as an about 275 kilobyte file on
compact disc (in duplicate). The duplicate compact discs, Copy 1 and Copy
2, are identical. The enclosed compact discs include one (1) file as follows:
File Name (1242-26-2.txt.txt), Creation Date (April 15, 2001), Computer
System (IBM-PC/MS-DOS/MS-Windows).

Respectfully submitted,

JENKINS & WILSON, P.A.

Arles A. Taylor, Jr.

Registration No. 39,395